

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A method of making a living tissue construct for repairing a perforation in a tympanic membrane, the method comprising  
providing a negative mold having a negative shape of the construct;  
suspending isolated tissue precursor cells in a hydrogel to form a liquid hydrogel-precursor cell composition;  
introducing the liquid hydrogel-precursor cell composition into the mold;  
inducing gel formation to solidify the liquid hydrogel-precursor cell composition to form the living tissue construct; and  
removing the living tissue construct from the mold after gel formation, wherein the construct has a shape suitable for ~~repairing~~ insertion into a perforation in a tympanic membrane.
2. (original) The method of claim 1, wherein the tissue precursor cells are chondrocytes or fibroblasts, or a combination thereof.
3. (original) The method of claim 1, wherein the tissue precursor cells are chondrocytes.
4. (currently amended) The method of claim 1, wherein the hydrogel is selected from the group consisting of alginate, chitosan, ~~pluronic~~ poly(oxyethylene)-poly(oxypropylene) block polymers solidified by changes in temperature, collagen, and agarose.
5. (original) The method of claim 1, wherein the hydrogel is alginate.

6. (original) The method of claim 5, wherein the alginate concentration is from 0.5% to 8%.

7. (original) The method of claim 5, wherein the alginate concentration is from 1% to 4%.

8. (original) The method of claim 5, wherein the alginate concentration is approximately 2%.

9. (original) The method of claim 1, wherein inducing gel formation comprises contacting the liquid hydrogel with a suitable concentration of a divalent cation.

10. (original) The method of claim 9, wherein the divalent cation is  $\text{Ca}^{++}$ .

11. (original) The method of claim 10, wherein the suitable  $\text{Ca}^{++}$  concentration is 0.2 g/ml of the liquid hydrogel-precursor cell composition.

12. (original) The method of claim 1, further comprising culturing the tissue precursor cells in the solidified hydrogel construct for a period of 1 to 30 days.

13. (currently amended) The method of claim 1, wherein the negative mold is prepared using ~~CAD/CAM~~ computer-aided design/computer-aided manufacturing or rapid prototyping.

14. (original) A method of repairing a perforation in a tympanic membrane in a mammal, the method comprising

providing a suitable negative mold having a negative shape of a living tissue repair construct;

suspending isolated tissue precursor cells in a hydrogel to form a liquid hydrogel-precursor cell composition;

introducing the liquid hydrogel-precursor cell composition into the mold;  
inducing gel formation to solidify the liquid hydrogel-precursor cell composition  
to form the living tissue repair construct;  
removing the living tissue repair construct from the mold after gel formation; and  
implanting the living tissue repair construct into the perforation in the tympanic  
membrane in the mammal.

15. (canceled)

16. (currently amended) ~~An injection-molded~~ A living tissue repair construct made by the  
process of claim 1.

17. (currently amended) The method of claim 1, wherein the hydrogel is prepared from a  
material selected from the group consisting of polysaccharides, proteins, polyphosphazenes,  
poly(oxyethylene)-poly(oxypropylene) block polymers, poly(oxyethylene)-poly(oxypropylene)  
block polymers of ethylene diamine, poly(acrylic acids), poly(methacrylic acids), copolymers of  
acrylic acid and methacrylic acid, poly(vinyl acetate), and sulfonated polymers.

18. (currently amended) The method of claim 1, wherein the tissue precursor cells are  
selected from the group consisting of epidermal cells, chondrocytes and other cells that form  
cartilage, dermal cells, fibroblasts, endothelial cells, ear canal cells, tympanic membrane cells,  
and epithelial cells.

19. (New) A living tissue repair construct made by the method of claim 1, wherein the  
liquid hydrogel-precursor cell composition is injected into the mold.